=> d his

L34

L35

L36

L37

8 S L33

2 S L34 AND L18

2 S L22, L35

8 S L34-L36

```
(FILE 'HOME' ENTERED AT 15:30:12 ON 13 NOV 2001)
SET COST OFF
```

```
FILE 'REGISTRY' ENTERED AT 15:30:28 ON 13 NOV 2001
                 E FLUORESCEIN/CN
L1
               1 S E3
                 SEL RID
L2
          10236 S E1
L3
             10 S L2 AND AS/ELS
                E .BETA.-ALANINE/CN
L4
               1 S E3
            807 S L2 AND SQL/FA
L5
            800 S L5 AND PROTEIN/FS
L6
              7 S L5 NOT L6
L7
              0 S L2 AND 107-95-9/CRN
\Gamma8
                E 1,2-ETHANEDITHIOL/CN
              1 S E3
L9
                 E DITHIOTHERITOL/CN
L10
              1 S E4
                E C4H10O2S2/MF
              5 S E3 AND 2 3 BUTANEDIOL
L11
                E DIMERCAPTOPROPANESULFONATE/CN
                 E DIMERCAPTO PROPANESULFONATE/CN
                E PROPANESULFONATE/CN
     FILE 'HCAPLUS' ENTERED AT 15:36:03 ON 13 NOV 2001
                 E VALE R/AU
            121 S E3, E4, E7-E11
L12
                E THRON K/AU
                E THORN K/AU
             29 S E3-E5, E11, E12
L13
                E COOKE R/AU
L14
            306 S E3-E20
                E COOKE ROGER/AU
L15
            116 S E3-E6
                 E MATUSKA M/AU
L16
              4 S E3, E4
                E NABER N/AU
             21 S E3-E6
L17
L18
            570 S L12-L17
L19
           3815 S L1
          17627 S FLUORESCEIN
L20
              4 S L18 AND L19, L20
L21
L22
              2 S L21 AND ?ARSEN?
                SEL RN
     FILE 'REGISTRY' ENTERED AT 15:39:12 ON 13 NOV 2001
L23
             34 S E1-E34
              6 S L2 AND L23
L24
              2 S L23 AND AS/ELS
L25
L26
             7 S L24,L25
L27
             27 S L23 NOT L26
L28
              3 S L27 AND (6/SQL OR 17/SQL)
L29
              2 S L28 NOT NCNC2/ES
L30
              6 S L9-L11
L31
              3 S L27 AND (C4H10O2S2 OR C3H8O3S3 OR C2H6S2)
              7 S L30, L31
L32
L33
              4 S L3 AND 2/AS
     FILE 'HCAPLUS' ENTERED AT 15:45:28 ON 13 NOV 2001
```

Point of Contect:

Jan Dalard

Librarian-Trycical Ociences

CM1 1E09-Tel: 308-4498

```
1 S L37 AND (L4 OR BETA ALANINE)
L38
L39
              2 S L37 AND L32
L40
              2 S L37 AND L29
     FILE 'HCAPLUS' ENTERED AT 15:47:56 ON 13 NOV 2001
                S CC..CC/SQSP
     FILE 'REGISTRY' ENTERED AT 15:48:03 ON 13 NOV 2001
L41
            837 S CC..CC/SQSP
     FILE 'HCAPLUS' ENTERED AT 15:48:10 ON 13 NOV 2001
            500 S L41
L42
L43
              3 S L42 AND L37
            8 S L37-L40,L43
L44
             57 S L19, L20 AND ?ARSEN?
L45
     FILE 'REGISTRY' ENTERED AT 15:49:28 ON 13 NOV 2001
                E AS/ELS
          65636 S E3 NOT L3
L46
     FILE 'HCAPLUS' ENTERED AT 15:49:52 ON 13 NOV 2001
1.47
             53 S L46 AND L19, L20
             76 S L45, L47
L48
             3 S L48 AND L42
L49
             3 S L48 AND L32
L50
L51
              9 S L44, L49, L50
                SEL HIT RN
     FILE 'REGISTRY' ENTERED AT 15:52:04 ON 13 NOV 2001
             48 S E1-E48
L52
L53
              5 S L52 AND L1, L2
L54
             1 S L52 AND L4
             3 S L52 AND L32
L55
L56
             39 S L52 NOT L53-L55
            4 S L56 AND L41
L57
=> fil reg
FILE 'REGISTRY' ENTERED AT 15:56:19 ON 13 NOV 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 American Chemical Society (ACS)
                          12 NOV 2001 HIGHEST RN 369354-32-5
STRUCTURE FILE UPDATES:
DICTIONARY FILE UPDATES: 12 NOV 2001 HIGHEST RN 369354-32-5
TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001
  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.
Crossover limits have been increased. See HELP CROSSOVER see
HELP CROSSOVER for details.
Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf
=> d 153 ide can tot
L53 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2001 ACS
RN
    311797-39-4 REGISTRY
    Benzenebutanamide, N-[3-[4',5'-bis(1,3,2-dithiarsolan-2-yl)-3',6'-
CN
     dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]amino]-3-
     oxopropyl]-4-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)- (9CI) (CA INDEX
     NAME)
```

MF C41 H35 As2 N3 O9 S4

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:27295

L53 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2001 ACS

RN **268741-25-9** REGISTRY

Propanamide, 3-amino-N-[4',5'-bis(1,3,2-dithiarsolan-2-yl)-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2: PN: WO0153325 PAGE: 49 claimed sequence

CN 3: PN: WO0153325 PAGE: 49 claimed sequence

MF C27 H24 As2 N2 O6 S4

SR CA

LC STN Files: CA, CAPLUS

2 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:149588

REFERENCE 2: 132:344976

L53 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2001 ACS

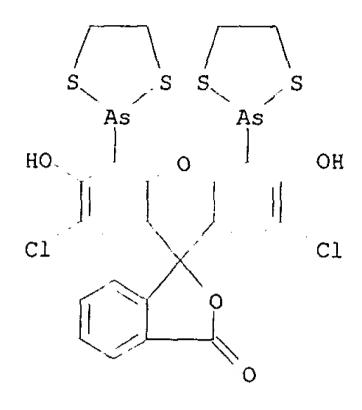
RN **223673-83-4** REGISTRY

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',7'-dichloro-4',5'-bis(1,3,2-dithiarsolan-2-yl)-3',6'-dihydroxy- (9CI) (CA INDEX NAME)

MF C24 H16 As2 C12 O5 S4

SR CA

LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:308804

L53 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2001 ACS

RN 212118-77-9 REGISTRY

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 4',5'-bis(1,3,2-dithiarsolan-2-yl)-3',6'-dihydroxy- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN FLASH

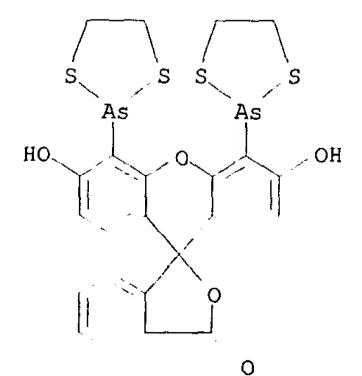
CN FlAsH-EDT2

CN Fluorescein arsenical helix binder

MF C24 H18 As2 O5 S4

SR CA

LC STN Files: CA, CAPLUS, TOXLIT, USPATFULL



5 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

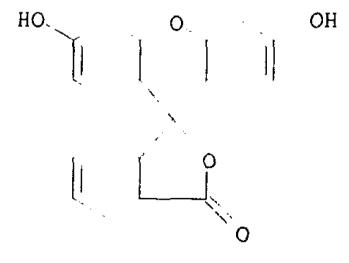
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:175077

REFERENCE 2: 134:66121

REFERENCE 3: 130:308804

REFERENCE 4: 130:150455 REFERENCE 5: 129:200138 L53 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2001 ACS RN 2321-07-5 REGISTRY Spiro(isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (9CI) CN (CA INDEX NAME) OTHER CA INDEX NAMES: Fluorescein (8CI) ÇN OTHER NAMES: 3', 6'-Dihydroxyfluoran CN 3',6'-Fluorandiol CN 3,6-Dihydroxyspiro[xanthene-9,3'-phthalide] CN9-(o-Carboxyphenyl)-6-hydroxy-3-isoxanthenone CNBenzoic acid, 2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)-CN C.I. 45350:1 CN C.I. Solvent Yellow 94 CN CN D and C Yellow No. 7 CN Fluorescein acid Japan Yellow 201 CN Japan Yellow No. 201 CN Resorcinolphthalein CN Solvent Yellow 94 CN Yellow fluorescein CN AR 518-45-6 FS 3D CONCORD DR 126605-73-0, 213880-86-5 MFC20 H12 O5 CICOM LC ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, STN Files: BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS\*, TOXLIT, TULSA, USAN, USPATFULL, VTB (\*File contains numerically searchable property data) Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\* (\*\*Enter CHEMLIST File for up-to-date regulatory information)



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3798 REFERENCES IN FILE CA (1967 TO DATE) 841 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 3809 REFERENCES IN FILE CAPLUS (1967 TO DATE) 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

1: 135:312834 REFERENCE 2: 135:310799 REFERENCE 3: 135:302553

REFERENCE

REFERENCE 4: 135:300686 REFERENCE 5: 135:300676 6: 135:300593 REFERENCE 7: 135:300567 REFERENCE 8: 135:300482 REFERENCE 9: 135:300290 REFERENCE REFERENCE 10: 135:299473 => d 154 ide can L54 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS RN **107-95-9** REGISTRY .beta.-Alanine (6CI, 8CI, 9CI) (CA INDEX NAME) CN OTHER NAMES: .beta.-Aminopropanoic acid CN.beta.-Aminopropionic acid ÇN .omega.-Aminopropionic acid CN 2-Carboxyethylamine CN 3-Aminopropanoic acid CN 3-Aminopropionic acid CN Abufene CN Propanoic acid, 3-amino-CN 3D CONCORD FS 87867-95-6 DR MFC3 H7 N O2 COM CI LC ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, STN Files: BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM\*, DRUGU, EMBASE, GMELIN\*, HODOC\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, SPECINFO, SYNTHLINE, TOXLIT, USPATFULL (\*File contains numerically searchable property data) Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\* (\*\*Enter CHEMLIST File for up-to-date regulatory information)  $H_2N-CH_2-CH_2-CO_2H$ \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\* 4873 REFERENCES IN FILE CA (1967 TO DATE) 392 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 4879 REFERENCES IN FILE CAPLUS (1967 TO DATE) 5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:303277

REFERENCE 2: 135:289030

REFERENCE 3: 135:288559

REFERENCE 4: 135:288105

REFERENCE 5: 135:284379

REFERENCE 6: 135:282370

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REFERENCE
            7: 135:277460
REFERENCE
            8: 135:273221
REFERENCE
            9: 135:273175
REFERENCE 10: 135:269042
=> d 155 ide can tot
L55 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2001 ACS
RN
     3483-12-3 REGISTRY
CN
     2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (9CI) (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
     2,3-Butanediol, 1,4-dimercapto-, (R*,R*)-
CN
CN
     Threitol, 1,4-dithio- (7CI, 8CI)
OTHER NAMES:
   (.+-.)-1,4-Dimercapto-2,3-butanediol
CN
CN (.+-.)-Dithiothreitol
CN
   1,4-Dithio-DL-threitol
   1,4-Dithiothreitol
CN
CN
    Cleland's reagent
CN
    Dithiothreitol
     DL-1, 4-Dimercapto-2, 3-dihydroxybutane
CN
CN
     DL-1,4-Dithiothreitol
CN
     DL-Dithiothreitol
CN
     DTT
     DTT (threitol derivative)
CN
CN
     rac-Dithiothreitol
CN
    Reagents, Cleland's
CN
     Sputolysin
CN
     threo-1,4-Dimercapto-2,3-butanediol
CN
     threo-2,3-Dihydroxy-1,4-butanedithiol
CN
     WR 34678
FS
     STEREOSEARCH
     27565-41-9, 28823-08-7, 214119-27-4
DR
MF
     C4 H10 O2 S2
CI
     COM
                  ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LÇ
     STN Files:
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, GMELIN*,
       IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PIRA,
       PROMT, RTECS*, SPECINFO, TOXLIT, USPATFULL
         (*File contains numerically searchable property data)
                      DSL**, EINECS**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
Relative stereochemistry.
          OH
                SH
HS
```

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

OH

3944 REFERENCES IN FILE CA (1967 TO DATE)
61 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3951 REFERENCES IN FILE CAPLUS (1967 TO DATE)

## 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967) REFERENCE 135:300667 1: 135:296102 REFERENCE 2: 135:288428 REFERENCE 3: 135:287802 REFERENCE 4: REFERENCE 5: 135:285360 135:284923 REFERENCE 6: REFERENCE 7: 135:284891 REFERENCE 8: 135:284831 REFERENCE 9: 135:282976 135:280378 REFERENCE 10: L55 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2001 ACS RN**540-63-6** REGISTRY 1,2-Ethanedithiol (6CI, 8CI, 9CI) CN (CA INDEX NAME) OTHER NAMES: 1,2-Dimercaptoethane CN1,2-Ethylenedithiol CNCN 2-Mercaptoethanethiol a-Ethylene dimercaptan CN Dithioethylene glycol CNDithioglycol CNEthylene dimercaptan CN Ethylene dithioglycol CN Ethylene glycol, dithio-CN CN Ethylenedithiol s-Ethylene dimercaptan CNFS 3D CONCORD C2 H6 S2 MF CI COM ANABSTR, BEILSTEIN\*, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, LCSTN Files: CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM\*, DIPPR\*, EMBASE, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK\*, MSDS-OHS, RTECS\*, SPECINFO, SYNTHLINE, TOXLIT, TRCTHERMO\*, USPATFULL (\*File contains numerically searchable property data) DSL\*\*, EINECS\*\*, TSCA\*\* Other Sources: (\*\*Enter CHEMLIST File for up-to-date regulatory information) $HS-CH_2-CH_2-SH$ \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\* 1713 REFERENCES IN FILE CA (1967 TO DATE) 49 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 1714 REFERENCES IN FILE CAPLUS (1967 TO DATE) 34 REFERENCES IN FILE CAOLD (PRIOR TO 1967) 1: 135:303597 REFERENCE 135:289812 REFERENCE 2:

REFERENCE

3: 135:288323

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REFERENCE
           4: 135:257352
REFERENCE
            5: 135:257222
REFERENCE
            6: 135:257182
REFERENCE
            7: 135:256819
REFERENCE
            8: 135:211083
            9: 135:210601
REFERENCE
REFERENCE 10: 135:195379
L55 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2001 ACS
    74-61-3 REGISTRY
RN
     1-Propanesulfonic acid, 2,3-dimercapto- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
     (.+-.)-2,3-Dimercapto-1-propanesulfonic acid
CN
     2,3-Dimercapto-1-propanesulfonic acid
CN
    2,3-Dimercaptopropanesulfonic acid
CN
     DL-2,3-Dimercaptopropane-1-sulfonic acid
CN
     3D CONCORD
FS
     88031-93-0
DR
MF
     C3 H8 O3 S3
CI
     COM
                 ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
LC
     STN Files:
       CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, CSCHEM, CSNB, DDFU, DRUGU,
       EMBASE, IPA, MRCK*, NIOSHTIC, RTECS*, TOXLIT, USPATFULL
         (*File contains numerically searchable property data)
        SH
HS-CH2-CH-CH2-SO3H
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            223 REFERENCES IN FILE CA (1967 TO DATE)
              38 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            223 REFERENCES IN FILE CAPLUS (1967 TO DATE)
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2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

1: 135:172207

2: 135:162413

3: 135:149588

4: 135:42007

5: 135:30115

7: 134:51018

9: 133:85389

8:

REFERENCE 10: 132:32023

134:306290

133:130988

REFERENCE

REFERENCE

REFERENCE

REFERENCE

REFERENCE

REFERENCE

REFERENCE

REFERENCE

REFERENCE

```
=> d 157 sqide can tot
    ANSWER 1 OF 4 REGISTRY COPYRIGHT 2001 ACS
L57
RN
    352206-69-0 REGISTRY
    Peptide, (Cys-Cys-Xaa-Xaa-Cys-Cys) (9CI) (CA INDEX NAME)
CN
    PROTEIN SEQUENCE
FS
SQL 6
NTE
type ----- location ---- description
uncommon Aaa-3
uncommon Aaa-4
SEQ 1 CCXXCC
          =====
HITS AT: 1-6
    Unspecified
MF
CI
    MAN
SR
    CA
    STN Files: CA, CAPLUS
LC
             1 REFERENCES IN FILE CA (1967 TO DATE)
             1 REFERENCES IN FILE CAPLUS (1967 TO DATE)
REFERENCE 1: 135:149588
L57 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2001 ACS
```

**268741-28-2** REGISTRY RN

L-Alanine, L-tryptophyl-L-.alpha.-glutamyl-L-alanyl-L-alanyl-L-alanyl-Larginyl-L-.alpha.-glutamyl-L-alanyl-L-cysteinyl-L-cysteinyl-L-arginyl-L-.alpha.-glutamyl-L-cysteinyl-L-cysteinyl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

46: PN: WO0114578 PAGE: 38 unclaimed sequence CN CN 4: PN: WO0047220 SEQID: 48 unclaimed sequence CN 9: PN: WO0153325 PAGE: 32 claimed sequence PROTEIN SEQUENCE; STEREOSEARCH FS SQL 17

SEQ 1 WEAAAREACC RECCARA

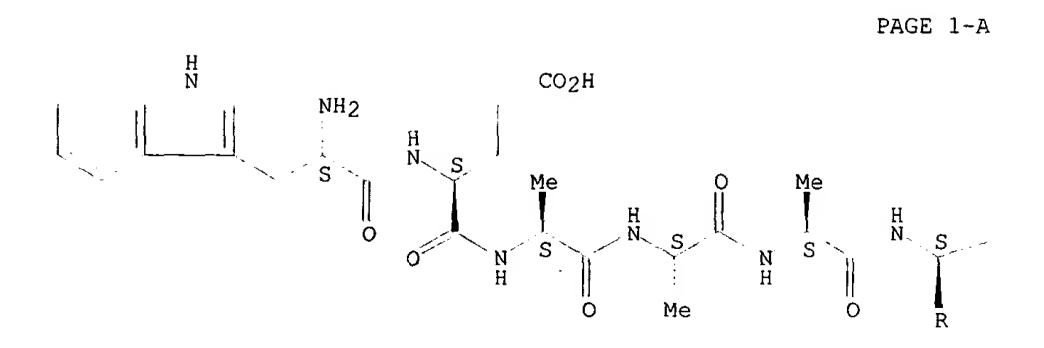
9-14 HITS AT:

C74 H119 N27 O24 S4 MF

SR CA

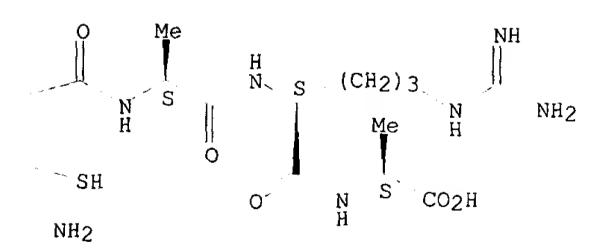
STN Files: CA, CAPLUS, TOXLIT, USPATFULL LC

Absolute stereochemistry.



PAGE 1-B

PAGE 2-B



4 REFERENCES IN FILE CA (1967 TO DATE)

4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:149588

REFERENCE 2: 134:204756

REFERENCE 3: 133:172215

REFERENCE 4: 132:344976

L57 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2001 ACS

RN 223673-79-8 REGISTRY

CN L-Alanine, L-alanyl-L-.alpha.-glutamyl-L-alanyl-L-alanyl-L-alanyl-L- arginyl-L-.alpha.-glutamyl-L-alanyl-L-cysteinyl-L-cysteinyl-L-arginyl-L-.alpha.-glutamyl-L-cysteinyl-L-alanyl-L-arginyl- (9CI) (CA INDEX NAME)

OTHER NAMES: